

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Southside Chattanooga Lead - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region IV

**Subject:** POLREP #9  
Residential Soil Removal Continues  
Southside Chattanooga Lead  
  
Chattanooga, TN  
Latitude: 35.0333793 Longitude: -85.3057271

**To:** Jim Mc Guire, ERRB Reg 4

**From:** Perry Gaughan, On Scene Coordinator

**Date:** 2/2/2013

**Reporting Period:** Jan 18th through Feb 2nd, 2013

## 1. Introduction

### 1.1 Background

<b>Site Number:</b>	B4J4	<b>Contract Number:</b>	
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	8/19/2012
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Time-Critical
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	9/17/2012	<b>Start Date:</b>	9/24/2012
<b>Demob Date:</b>		<b>Completion Date:</b>	
<b>CERCLIS ID:</b>		<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	
<b>FPN#:</b>		<b>Reimbursable Account #:</b>	

#### 1.1.1 Incident Category

Lead contaminated soil on 52 properties being removed as a time critical removal under CERCLA.

#### 1.1.2 Site Description

The Tennessee Department of Environmental Conservation (TDEC) requested the EPA Region 4 Emergency Response and Removal Branch's (ERRB's) assistance after discovering that the lawns of one residence and potentially several more were contaminated with lead along Read Avenue near downtown Chattanooga. Initially, one resident along Read Avenue presented to the emergency room with severe fatigue and abdominal pain. Emergency room blood work indicated lead levels approaching 20 micrograms per deciliter (ug/dl) which alerted TDEC to conduct follow up assessments. TDEC requested assistance from ERRB to characterize the soil around the home and an initial assessment was conducted with SEDS (Science and Ecosystem Support Division) Athens in which three homes were assessed as well as a public park and playground area at 1700 Mitchell Avenue. Ten samples were collected and two samples showed elevated lead levels exceeding 400 ppm.

### **1.1.2.1 Location**

The Southside Chattanooga Lead Site is located along Read, Mitchell and Carr Avenues south of Main Street in Chattanooga, Hamilton County, Tennessee (Latitude: 35.0456, Longitude: -85.3097). The area is a blend of young, middle income couples who are renovating older constructed homes and low to middle income retired couples who have resided in the area for 20 plus years. The vast majority of homes were built in the early 1900's.

The Southside Chattanooga area is immediately adjacent to downtown Chattanooga and was prone to flooding during the early 1900's and prior to the development of damming and flood control measures by the Tennessee Valley Authority (TVA). Several of the homes along Read and Mitchell Avenues appear to have been built on 4-5 feet of clay fill.

### **1.1.2.2 Description of Threat**

### **1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results**

In response to a request from TDEC, the EPA Region 4 ERRB with assistance from SESD Athens, conducted two follow up assessments of the Read and Mitchell Avenue area in January and April 2012. Of the 81 homes (162 front and back yards) assessed near downtown Chattanooga, 68 lawns (42 %) have lead levels exceeding 400 ppm. Lead levels range from 400 – 4000 ppm. The 4000 ppm sample was collected from a lawn along the 1600 block of Read Ave and the sample contained very dark fine material, most likely a high concentration of bag-house dust.

In addition, the Battle Academy Elementary School which neighbors the site was sampled in mid June 2012. A 20' by 20' grid was laid over the school property and 140 grids were screened using X-ray fluorescence spectroscopy (XRF). No significant lead contamination was found and all lead levels were below 55 ppm.

## **2. Current Activities**

### **2.1 Operations Section**

#### **2.1.1 Narrative**

#### **Jan 21st through Jan 25th, 2013**

On Jan 21st, ERRs contractors continued backfilling the backyards of 1719 and 1721 Read Ave, made driveway repairs and planted previously removed shrubs to the home owners specifications. The following day the backyards of 1715, 1717, 1719 and 1721 were sodded and an excavation crew began removing contaminated soil from 1605 and 1607 Read Ave. Some areas adjacent to the foundation of 1607 were hand dug due to the degree of historical structural damage along the outer brick wall. ERRs took significant measures to minimize the amount of vibration to the 1607 structure and a large portion of the soil removal around the home foundation was done by hand. The mini excavator and bobcat were used sparingly to reduce vibration to the structure.

Operations were cancelled on Jan 25th due to an ice storm and icy road conditions. On Jan 26th, ERRs addressed puddled areas at the end of several driveways along Read Ave where rain water had pooled over sod and added and compacted crush and run gravel to fix the issue.

START contractors continue to assist with technical support, daily operations, post-excavation confirmation sampling using X-ray fluorescence spectroscopy (Xrf) and air sampling during excavation and staging of contaminated soils.

#### **Jan 28th through Feb 2nd, 2013**

On Jan 28th, the ERRs crew continued to remove contaminated soil from the side yard of 1605 Read Ave and at the adjacent property line of 110 E. Main Street. The crew also began excavation at 1607 Read Avenue front yard and side yard of 1609 Read Avenue. Plants on the 1609 Read front yard were dug up and placed aside during the soil removal.

On Jan 29th, the ERRs crew backfilled 110 E. Main Street, 1605 Read, 1607 Read, and 1609 Read with clay and topsoil, graded and covered the areas with a straw layer.

On Jan 30th, heavy rains rolled through Chattanooga and the OSC and Start reviewed areas of concern between homes for drainage and runoff issues during the rain event. The most erosion was observed at 1615 Read, where active construction is taking place. This property still requires final grading and sod once the resident's contractor has completed work at the front of the property. Also, water was observed gushing largely from the base of the four-foot limestone wall along some sections of west Read Ave in front of 1607 and 1615 Read.

On Feb 1st, ERRs placed sod at 110 East Main Street, 1605 Read, 1607 Read and 1609 Read. The crew also dismantled a small section of fence at 1609 Read, continued soil removal at 1609 Read Ave, and began excavation at 1611 Read. On Feb 2nd, ERRs continued to remove contaminated soil from 1609 Read, however at approximately 1100 hours, heavy snowfall began and was accumulating on the ground. ERRs project manager stopped work at 1100 hours due to icy road conditions.

START contractors continue to assist with technical support, daily operations, post-excavation confirmation sampling using X-ray fluorescence spectroscopy (Xrf) and air sampling during excavation and staging of contaminated soils.

The OSC continues to coordinate clean up efforts and assessments with Tenn Dept of Environmental Conservation (TDEC) and Tenn Dept of Health as well as Hamilton County health officials. TDEC and the OSC plan to update Chattanooga City Council during February 2013. A specific date has not been set by City Council.

The OSC, Tenn Dept of Health and Tenn Dept of Environmental Conservation (TDEC) are currently preparing an assessment strategy for Chattanooga City Council addressing future lead assessments in the downtown area.

## 2.1.2 Response Actions to Date

## 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

## 2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

## 2.2 Planning Section

No information available at this time.

## 2.3 Logistics Section

No information available at this time.

## 2.4 Finance Section

### Estimated Costs \*

	<b>Budgeted</b>	<b>Total To Date</b>	<b>Remaining</b>	<b>% Remaining</b>
<b>Extramural Costs</b>				
ERRS - Cleanup Contractor	\$1,300,000.00	\$880,000.00	\$420,000.00	32.31%

TAT/START	\$100,000.00	\$50,000.00	\$50,000.00	50.00%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	\$1,400,000.00	\$930,000.00	\$470,000.00	33.57%

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

## **2.5 Other Command Staff**

No information available at this time.

## **3. Participating Entities**

### **3.1 Unified Command**

### **3.2 Cooperating Agencies**

The OSC continues to coordinate clean up efforts and assessments with Tenn Dept of Environmental Conservation (TDEC) and Tenn Dept of Health as well as Hamilton County health officials. TDEC and the OSC plan to update Chattanooga City Council during February 2013. A specific date has not been set by City Council.

The OSC, Tenn Dept of Health and Tenn Dept of Environmental Conservation (TDEC) are currently preparing an assessment strategy for Chattanooga City Council addressing future lead assessments in the downtown area.

## **4. Personnel On Site**

No information available at this time.

## **5. Definition of Terms**

No information available at this time.

## **6. Additional sources of information**

No information available at this time.

## **7. Situational Reference Materials**

No information available at this time.